Appl. No.:

10/700,167

Response dated November 13, 2006

Reply to Office Action of September 13, 2006

## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

Claim 1 (cancelled).

Claim 2 (currently amended): A metalworking lubricant composition comprising:

- A) at least one lubricating oil; and
- B) at least one base-catalyzed branched reaction product comprising the following reactants:
  - a) at least one compound of formula l

$$R^1(X)_3 \qquad \qquad (I)$$

wherein each X group is a halogen atom or one X group is a halogen atom and two X groups represent an epoxy oxygen atom, which is attached to two adjacent carbon atoms in the R<sup>1</sup> group to form an epoxy group, and R<sup>1</sup> is an alkanetriyl group containing from 3 to 10 carbon atoms; and

b) at least one compound having the formula II

$$R^2X(AO)_nY$$
 (II)

wherein R<sup>2</sup> is a substituted or unsubstituted, saturated or unsaturated, organic group having from 1 to 36 carbon atoms; X is –O–, –S–, or –NR<sup>3</sup>– where R<sup>3</sup> is hydrocarbon or a C<sub>1</sub>-C<sub>18</sub> alkyl group; each AO group is independently an ethyleneoxy, 1,2-propyleneoxy, or 1,2-butyleneoxy group, n is a number from 0 to

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200; and Y is hydrogen, or Y can be a mercapto group or an amino group or a  $C_1$ - $C_6$  alkyl amino group in place of a terminal –OH group, provided that when Y is mercapto or an amino group or a  $C_1$ - $C_6$  alkyl amino group, n is at least 1;

wherein the mole ratio of the linking compound a) to b) is from 0.1:1 to 5:1wherein the metal working lubricant composition has reduced foaming properties in aqueous and nonaqueous metal working formulations and improved lubricating and extreme pressure properties and, wherein, R<sup>2</sup> is optionally substituted with a member selected from the group consisting of mercaptan functionably, thio functionably, amine functionably, amide functionably, alcohol functionably, silicone functionably, ether functionably, and combinations thereof.

Claim 3 (currently amended): An aqueous electroplating composition comprising:

- A) at least one metal or metalloid; and
- B) at least one base-catalyzed reaction product comprising the following reactants:
  - a) at least one compound of formula I

$$R^1(X)_3 \qquad \qquad (I)$$

wherein each X group is a halogen atom or one X group is a halogen atom and two X groups represent an epoxy oxygen atom, which is attached to two adjacent carbon atoms in the R<sup>1</sup> group to form an epoxy group, and R<sup>1</sup> is an alkanetriyl group containing from 3 to 10 carbon atoms; and

b) at least one compound having the formula II

$$R^2X(AO)_nY$$
 (II)

wherein R2 is a substituted or unsubstituted, saturated or

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unsaturated, organic group having from 1 to 36 carbon atoms; X is -O-, -S-, or  $-NR^3-$  where  $R^3$  is hydrogen or a  $C_1-C_{18}$  alkyl group; each AO group is independently an ethyleneoxy, 1,2-propyleneoxy, or 1,2-butyleneoxy group, n is a number from 0 to 200; and Y is hydrogen, or Y can be a mercapto group or an amino group or a  $C_1-C_6$  alkylamino group in place of a terminal -OH group, provided that when Y is mercapto or an amino group, or a  $C_1-C_6$  alkylamino group, n is at least 1;

wherein the mole ratio of component a) to b) is from 0.1:1 to 5:1, and wherein the base catalyzed reaction product is not epoxy functional and provides improved brightening and reduced foaming and, wherein, R<sup>2</sup> is optionally substituted with a member selected from the group consisting of mercaptan functionably, thio functionably, amine functionably, amide functionably, alcohol functionably, silicone functionably, ether functionably, and combinations thereof.